

PWTA FAQs

Revised: October 14, 2003

Q1: What does the Private Well Testing Act, N.J.S.A. 58:12A-26 et seq. (PWTA) require?

A1: The Act requires that, when property with certain types of drinking water wells is sold or leased, the well water must be tested for contaminants. The results of the water testing must be reviewed by both buyer and seller, or in the case of a leased property, by the lessee.

Q2: What types of properties are subject to the testing requirement?

A2: The Act covers SALES of two types of properties, and LEASES of other properties. Testing is required for the following:

- SALE of any property that gets its drinking water from a private well located on the property, **and**
- SALE of any property that gets its drinking water from a well that has less than 15 service connections or that does not regularly serve an average of at least 25 people daily at least 60 days out of each year.
- Leasing of any property that gets its drinking water from a private well that isn't required to be tested under to any other State law.

Q3: When in the real estate sales process does testing have to happen? When the contract is signed? At the closing? What about rentals?

A3: The Act requires the following:

- Every contract of sale for a property subject to the Act must include a provision requiring the testing as a condition of the sale.
- A closing of the title of sale on a real property that is subject to the Act may not occur unless both buyer and seller have received and reviewed a copy of the water test results, and have signed a paper certifying that they have received and reviewed a copy of the results.
- Every time a rental property subject to the Act is leased, a written copy of the most recent test results must be given to the lessee.

Q4: When do the testing requirements take effect?

A4: Every contract of sale executed on or after the effective date of the statute, September 14, 2002 for property subject to the Private Well Testing Act is required to meet the testing requirements. Testing is not required for real estate transactions that are already under contract before the statute went into effect (September 14, 2002). The testing requirement for leased properties must be completed by March 14, 2004, and at least once every five years thereafter.

While testing is not required under the law for real estate transactions under contract prior to September 14, 2002, the DEP recommends that well water be tested once a year or in connection with a real estate sale. This testing provides important water quality information that people and their families should know.

Q5: How much will the testing cost?

A5: Laboratories testing rates vary, depending on how hard it is to collect the sample, the location of the property in relation to the lab, and other factors. The DEP estimates that the average price will be between \$450 and \$650.

Q6: What will happen if the testing is not done? Will the property sale be void?

A6: Testing of your well water is important to your family's health. If testing is not done, you and your family may face a health risk and not know it. You may also be subject to enforcement action.

Q7: My property has public water for drinking, and also an on-site well used only for other purposes such as lawn watering. Does that well have to be tested?

A7: No. Only drinking water wells are subject. See [FAQ #2](#) above

Q8: Does the testing requirement apply to drinking water wells at newly constructed residences?

A8: Yes, if the property is being sold or leased.

Q9: What contaminants must the well water be tested for?

A9: That depends on where you live. All wells must be tested for the following contaminants: total coliform bacteria, iron, manganese, pH, all volatile organic compounds (VOCs) with established Maximum Contaminant Levels, nitrate, and lead. If total coliform bacteria are detected, a test must also be conducted for fecal coliform or E. coli. Private wells located in certain counties will also have to test for arsenic, mercury and 48-hour rapid gross alpha particle activity. Click [here](http://www.nj.gov/dep/pwta/pwta_list.htm) (http://www.nj.gov/dep/pwta/pwta_list.htm) for a table showing all contaminants that must be tested.

Q10: Who must collect the sample? May I do it myself?

A10: The sample must be collected by either an employee of a certified drinking water laboratory certified to collect PWTA samples; or by an authorized representative of such a laboratory. See the PWTA rules at [N.J.A.C. 7:9E-1.2](#) (link to: <http://www.nj.gov/dep/pwta/pwtafinal.pdf>) for definitions of "certified laboratory" and "authorized representative."

Q11: May a real estate agent collect water samples for analysis?

A11: If a real estate agent is a NJ "certified laboratory," as defined at [N.J.A.C. 7:9E-1.2](#) (link to: <http://www.nj.gov/dep/pwta/pwtafinal.pdf>), an employee of a New Jersey certified laboratory, or an "authorized representative," as defined at [N.J.A.C. 7:9E-1.2](#) (link to: <http://www.nj.gov/dep/pwta/pwtafinal.pdf>), the real estate agent may take samples for all contaminants except for pH. Samples for pH testing must be collected by an employee of a laboratory that is certified to test for pH, in accordance with [N.J.A.C. 7:9E-2.2](#) (link to: <http://www.nj.gov/dep/pwta/pwtafinal.pdf>).

Q12: I am a home inspector, and I hear that the PWTA rules require submittal of Global Positioning System (GPS) coordinates for the location of each well. May I offer my customers GPS coordinate collection service for pay?

A12: Yes. Any person may collect GPS coordinates to be used by a laboratory in submitting well test results. Laboratories, realtors, home inspectors, and surveyors

are examples of professionals who may choose to offer this service. However, the coordinates must be collected in accordance with the PWTA rules at N.J.A.C. 7:9E-3.1(a)1xi (<http://www.nj.gov/dep/pwta/pwtafinal.pdf>) which refers to the DEP's standard requirements for GPS coordinates, found in the DEP Geographic Information Systems (GIS) rules at N.J.A.C. 7:1D, Appendix A.

Q13: What kind of equipment do I need to meet the Department's GPS Data collection standards? Does the Department require or recommend certain brands or receiver models?

A13: The Department does not endorse nor recommend certain brands or models for the collection of GPS coordinates. However, only GPS equipment that can meet the performance criteria of the Department's GIS program is acceptable. A description of the GPS receiver requirements can be found on the DEP's Private Well Testing Act website (<http://www.nj.gov/dep/pwta/pwtafinal.pdf>). More detailed information on the Department's GIS program can be found at www.state.nj.us/dep/gis

Q14: I'm a reporting lab and want to report GPS data. What are the correct units for reporting GPS? Should these values contain a decimal point?

A14: Labs should be reporting the coordinates in New Jersey State Plane (survey) feet, referenced to the NAD83 horizontal datum. A coordinate in this system consists of an Easting (x) and a Northing (y). Valid values within the state have Eastings ranging from 192,000 to 660,000 and Northings ranging from 34,000 to 920,000. There is no need for decimals, as these values represent integer feet on the ground. None of the required GPS receivers (GIS types included) can accurately measure to within a tenth of a foot.

Caution: The New Jersey State Plane Coordinate System is not the same as the Universal Transverse Mercator (UTM) system, which also uses the terms Eastings and Northings. Be certain you are using the correct system.

Q15: Are latitude and longitude coordinates allowed when reporting GPS coordinates? What if my GPS unit records in latitude and longitude?

A15: Labs should not be reporting GPS coordinates in latitude and longitude, but rather only in the NJ State Plane Coordinate System, in survey feet units, referenced to the NAD83 datum (see above question). However, if latitude & longitude values are read from the GPS receiver's display a conversion is necessary before reporting. Make sure there are enough decimals when performing the conversion. Here is what is needed for an accurate conversion: Five (5) decimal places for Decimal Degrees (DD.ddddd) gets a coordinate to within 3 feet; three (3) decimal places for Degrees Decimal Minutes (DD MM.mmm) gets a coordinate to within 5 feet, and one (1) decimal place for Degrees Minutes Decimal Seconds (DD MM SS.s) gets a coordinate to within 9 feet.

Caution: If 4 decimal places are used for DD then the coordinate might be only within 30 ft. Similarly, if 2 decimal places are used for DDM then the coordinate might be only within 50 ft, if 0 decimal places are used for DMDS then the coordinate might be only within 90 ft.

Coordinates in other coordinate systems must be converted to New Jersey State Plane coordinates. GPS receivers designed for GIS data collection have the conversion utilities available in the processing software that comes with the receiver. There are also conversion utilities ([CORPSCON](http://crunch.tec.army.mil/software/corpscon/corpscon.html) link to: <http://crunch.tec.army.mil/software/corpscon/corpscon.html>) available on the worldwide web.

Q16: Where can I find a list of New Jersey certified drinking water labs?

A16: Click [here](http://www.nj.gov/dep/pwta/pwta_lablist.htm) (link to: http://www.nj.gov/dep/pwta/pwta_lablist.htm) for a list of certified drinking water laboratories that conduct PWTa testing.

Q17: Who pays for the sampling and testing?

A17: When there is a sale of property, the costs are negotiated between the buyer and the seller. When property is leased, the landlord must obtain and pay for the testing and provide the results to the tenant.

Q18: Where in my house should the water sample get collected? What if I have a water softener or other treatment unit installed?

A18: The water sample must be collected on untreated water. If the plumbing in the building has a water softener, water filter, or other treatment unit installed, the sample must be collected before the water goes through the unit. If there is no treatment unit installed, the water may be taken from any cold water, non-aerated tap in the building.

Q19: Previously, I had testing done for other reasons. May I use those test results to comply with the PWTa? For example, may I use test results from four months ago?

A19: If the sample was collected and tested in accordance with all the requirements of the PWTa rules at [N.J.A.C. 7:9E](#) (link to: <http://www.nj.gov/dep/pwta/pwtafinal.pdf>), the test results may be used to comply with the law for a year after the sample was collected, except for the coliform results, which may be used for six months after sample collection. Of course, if a new well were installed, the test results from the old well could not be used. See [N.J.A.C. 7:9E - 3.3](#) (link to: <http://www.nj.gov/dep/pwta/pwtafinal.pdf>) for full details.

Q20: Can more than one laboratory be used for the testing?

A20: Yes, as long as all the laboratories are certified by the NJDEP for the analysis of the particular parameters in accordance with [N.J.A.C. 7:18](#) (link to: <http://www.nj.gov/dep/pwta/pwtaadopamend.pdf>). It is important to note that the party collecting the sample must be certified by the DEP for the collection for those PWTa parameters or the collector must be an authorized representative of a certified laboratory. The laboratories performing the analysis must be certified by the DEP for the analysis of that parameter. The list of laboratories certified by the DEP for the collection and/or analyses of PWTa parameters can be found at http://www.nj.gov/dep/pwta/pwta_lablist.htm. However, the PWTa rules at [N.J.A.C. 7:9E-3.1\(b\)](#) (link to: <http://www.nj.gov/dep/pwta/pwtafinal.pdf>) require that one lab coordinate and submit all the PWTa results to the DEP electronically.

Q21: May I test my well for additional parameters not required in the PWTA rules?

A21: Yes. The rules set minimum parameters. Anyone is free to test for more contaminants. If you choose to have additional tests, the DEP recommends using a New Jersey laboratory (link to: http://www.nj.gov/dep/pwta/pwta_lablist.htm) that is certified by the DEP for the analysis of that parameter in drinking water.

Q22: Will the lab tell me if my water is clean?

A22: The laboratory is required to report the test results to the person who requested the test, on a New Jersey Private Well Testing Form (link to: <http://www.nj.gov/dep/pwta/njtestreportingform.pdf>) provided by the DEP. The reporting form will show how the well water results compare with State and Federal drinking water standards. For PWTA parameter standards, click here (http://www.state.nj.us/dep/pwta/MCL_Table_6-11-03.xls). For all drinking water standards, click here. (link to: www.state.nj.us/dep/watersupply/standard.htm.)

Q23: If the well water does not meet one or more of the drinking water standards, does that mean it's not safe to drink?

A23: Not necessarily. Some of the standards are based on aesthetics (secondary standards), while some are based on long-term health effects (primary standards). . The fact that water tests above the standard would not necessarily mean that the water is unsafe to drink. For example, high levels of iron (secondary standard) in the water are generally not dangerous but do give the water an unpleasant taste. On the other hand, the presence of nitrates (primary standard) above the MCL may cause a condition called blue baby syndrome in infants. Learn more about New Jersey's PWTA standards by clicking here (link to: http://www.state.nj.us/dep/pwta/MCL_Table_6-11-03.xls) or the national drinking water standards by clicking here (link to www.epa.gov/safewater).

Q24: If the well water does not meet one or more of the drinking water standards, can the property sale be completed? Does the water have to be treated before the property is sold or rented?

A24: The law does not prohibit the sale of property if the water fails one or more drinking water standards. The law mainly ensures that all parties to the real estate transaction know the facts about the well water so that they can make well-informed decisions. Of course, it is possible that mortgage companies or local health departments may require treatment of the water in some cases.

Q25: If a well fails to meet one or more of the standards, who will pay to have the water treated?

A25: The law does not require treatment for well water that fails to meet standards. Therefore, if a well owner chooses to treat the water, they are responsible for paying for treatment, or for obtaining assistance in paying. In some cases the DEP or other government agencies may provide funding assistance for treatment for some types of drinking water contamination. The New Jersey Private Well Testing Form (link to: <http://www.nj.gov/dep/pwta/njtestreportingform.pdf>), upon which test results are reported, will include information on any available assistance.

Q26: If a well fails to meet one or more of the standards, will DEP make that information public?

A26: No. The laboratory reports test results to the person who requested the testing, to the DEP, and to the local health authority. Both the DEP and the local health authority are required to keep the address of tested wells confidential. The laboratory will provide a copy of the test results on the New Jersey Private Well Testing Form to the person who requested the testing. In addition, the laboratory reports the water test results to the DEP electronically. The DEP in turn notifies the local health authority of test results that exceeded the standards. If analysis shows an exceedance of an acute parameter, such as coliform or nitrates, the laboratory, which analyses the water sample, notifies the local health authority directly. In some situations, the local health authority has the discretion to notify the reported presence of a PWTa parameter in a private well to nearby well owners to test for the parameter of concern. Under the law, the local health authority may not reveal the address or location of the impacted residence. Lastly, the DEP may provide general compilations of water test results data collected that may be identified by county and municipality or other appropriate areas of delineation.

Q27: What are the meanings of the terms MCL, Action Level, and recommended limit regarding Safe Drinking Standards?

A27:

- A MCL, or Maximum Contaminant Limit, means the maximum permissible level of a primary contaminant that is allowed in drinking water in accordance with the Safe Drinking Water Act and corresponding regulations.
- Action levels mean the concentrations of certain primary contaminants (i.e., lead and copper) in drinking water at which treatment requirements may be initiated by the Federal Safe Drinking Water Regulations.
- Recommended limit means the optimum range for secondary contaminants (i.e., iron, manganese and pH) in accordance with the New Jersey State Drinking Water Regulations.

Q28: Some of literature refers to point-of-entry (POE) and point-of-use (POU) treatment, what is the difference?

A28: Point-of-entry (POE) devices are installed where the water supply enters the home. POE treatment devices consist of equipment applied to water entering the house or building for the purpose of reducing contaminants in all water distributed throughout the house or building. **Point-of-use (POU)** devices are installed at the tap and can be used to effectively remove contaminants from the water at the tap only. A POU water treatment device is a device or equipment used for the purpose of reducing contaminants in water at a single tap.

Q29: What are the types of home drinking water treatment devices available, and which are generally effective for specific contaminants?

A29: Chemical Treatment: There are generally three major types of home drinking water treatment devices available to consumers for removing chemical contaminants. These treatment devices include **filters, distillers, and softeners. Filters, such as carbon or reverse osmosis**, use different kinds of media to filter out contaminants from drinking water as the water passes through it. **Distillers** use a process where the water is heated and subsequently cooled to remove contaminants. **Water softeners**

utilize a process known as **ion exchange** to remove contaminants from drinking water. Ion exchange uses reciprocal transfer of contaminant ions between the drinking water and a resin or other solid media to remove a contaminant. These devices are capable of removing a variety of contaminants that may be found in drinking water, but individually they may not provide all of the necessary treatment for all contaminants of concern.

Microbiological Treatment: Microbiological treatment can be achieved either through disinfection or physical removal. For microbiological disinfecting, treatment devices such as **ultra violet light (UV) or Chlorinators** may be effective. **Reverse osmosis** can also be used to effectively treat water with microbiological contamination.

For more specific information regarding the effectiveness of these treatment devices, we recommend visiting the National Sanitary Foundation (NSF) website at <http://www.nsf.org/dwtu/>. NSF is a non-profit organization that provides information to consumers and ranks drinking water treatment devices for their inherent effectiveness for specific contaminants.

Q30: My county also requires testing of private wells. Which set of regulations do I follow: The county's or the State of New Jersey's?

A30: Both the county and state requirements must be met. If there is an overlap between the two, the more stringent of the two regulations will govern. Please check with your local health authority or municipal office for further information.

Q31: What is a 48-hour rapid gross alpha test?

A31: The 48-hour rapid gross alpha test identifies the presence of gross alpha particle activity in your well water. Alpha particles are emitted during the decay of certain radioactive substances. Gross Alpha particle activity includes radium, uranium and thorium, but most of the gross alpha radioactivity found in drinking water is from radium. New Jersey has adopted a protocol that requires the analysis of a gross alpha sample with 48 hours of sample collection. The 48-hour rapid gross alpha test includes the gross alpha particle activity captured from radium-224, an isotope with a half-life of 3.64 days, which is not captured using the standard USEPA method.

Q32: In New Jersey, where is gross alpha particle activity a concern?

A32: While gross alpha can be found in most rocks and soil in New Jersey, studies have shown that elevated levels of naturally occurring radioactivity appear mostly in southern New Jersey's Kirkwood-Cohansey aquifer. The Kirkwood-Cohansey aquifer is present in all or parts of the following counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean and Salem Counties. Many of the private wells located in these counties draw from the Kirkwood-Cohansey aquifer. The 48-hour rapid gross alpha testing is phased in accordance with the Private Well Test Act Regulations in certain counties when property is leased or transferred by a contract of sale (please see schedule below). The Attorney General's Office has given formal agency advice that law applies to real estate transactions in Cumberland and Gloucester Counties where the sales contract is executed on or after March 15, 2003.

Q33: Who is required to test for gross alpha particle activity in New Jersey?

A33: To ensure adequate laboratory capacity, the PWTA Rule phased in gross alpha testing requirements. The PWTA Rule applies to real-estate transactions where the sales contract is executed on or after the effective date in particular counties. For properties subject to the PWTA, the schedule is as follows: For Cumberland and Gloucester Counties, contract(s) of sale that were signed on or after March 15, 2003; for Atlantic, Burlington, Camden and Salem Counties, contract(s) of sale that were signed on or after September 16, 2003; and for Cape May, Hunterdon, Mercer, Middlesex, Monmouth and Ocean Counties, contract(s) of sale that were signed on or after March 16, 2004.

Q34: How do I arrange for a 48-hour rapid gross alpha test?

A34: There are currently six (6) laboratories (see below) that are certified by the DEP to analyze for the 48-hour rapid gross alpha test. Although, most of the labs certified for the 48-hour gross alpha test are located outside New Jersey, arrangements can be made to have samples shipped to one of these labs for analysis. Many laboratories certified for sampling and/or analysis for other PWTA parameters can arrange to have one of these laboratories conduct the gross alpha test analysis.

<u>Laboratory</u>	<u>City</u>	<u>State</u>	<u>Dep Laboratory ID #</u>
KNL Lab. Services	Tampa	FL	FL008
NJ DHSS	Trenton	NJ	11148
pCi/Labs	Orangeburg	NY	NY009
Sanford Cohen & Associates	Montgomery	AL	AL001
STL	Earth City	MO	MO002
Waste Stream	Buffalo	NY	NY977

For information regarding these and other certified laboratories, please see the following link: (http://www.state.nj.us/dep/pwta/pwta_lablist.htm)

Q35: How do I interpret the 48-hour rapid gross alpha testing results?

A35: Gross alpha particle activity in drinking water is measured in the standard unit of picocuries per liter (pCi/l). The State and Federal Maximum Contaminant Level (MCL) standard for gross alpha particle activity in drinking water is 15 pCi/l. The following illustrates the degree of significance for gross alpha particle activity if detected and what, if any, appropriate action is recommended:

- If testing results show that gross alpha particle activity is greater than 15 pCi/l, then the DEP recommends water treatment to reduce concentrations to below the standard.
- If testing results show gross alpha particle activity is greater than 5 pCi/l, but less than 15 pCi, then the NJDEP recommends testing for radium 226 and 228 (USEPA

Method 903.0 and 904.0, respectively). If this additional testing shows that combined radium levels are above 5 pCi/l, then water treatment is recommended to reduce concentrations to below the standard.

- If testing results show gross alpha activity is less than 5 pCi/l, no further action is recommended.

For additional information concerning sampling and analysis for gross alpha particle activity, please contact the DEP's Office of Quality Assurance at (609) 292-3950.

Q36: What can be done if gross alpha particle activity is detected in my potable well water?

A36: Several measures can be taken to reduce or eliminate radioactivity in your drinking water. The following specific options are recommended:

- 1) If available, consider connecting to a municipal water system.
- 2) Installing a point-of-entry treatment device, such as a water softener or ion exchange water treatment system. These are considered cost effective measures that can reduce the radioactivity in drinking water. **However, if you are treating for the removal of Volatile Organic Compounds (VOCs), the gross alpha particle activity should be treated prior to the VOC treatment (see note below).**
- 3) Install a point-of-use water treatment device, such as ion exchange or reverse osmosis system. This can effectively treat the drinking water at the tap for drinking and food preparation.
- 4) Purchase bottled water for drinking and food preparation. However, consumers need to evaluate the long-term cost of this measure.
- 5) Consider either modifying your current well or possibly drilling a new well to acquire water from a deeper aquifer known to have either no or acceptable levels of radioactivity.

Note: water treatment devices, such as water softeners, and ion exchange and reverse osmosis units, must be maintained in accordance with the manufacturer's specification so they are continually effective. Furthermore, after installing one of these water treatment systems, it is recommended that you conduct another gross alpha test to verify that the installed treatment device is effectively working and reducing radioactivity to a satisfactory level. If you are currently using an activated carbon system to treat your well water, it is essential that you first treat for the removal of gross alpha particle activity. This is to prevent the accumulation of gross alpha particle activity within the carbon bed of the treatment device. Further information can be obtained by contacting your local health office to determine which type of treatment system may be appropriate for your home. [Click here](http://www.state.nj.us/health/lh/lhdirectory.pdf) (link to: www.state.nj.us/health/lh/lhdirectory.pdf)

Q37: If the well water does not meet one or more of the drinking water standards, what type of assistance from the State is available for treatment?

A37: Generally, homeowners are responsible for installation and maintenance costs that are incurred concerning their potable well water. However, there are two state programs that may be available to homeowners for financial assistance if specific eligibility requirements are met:

1.) The **Spill Compensation Fund Program** (commonly known as "Spill Fund") administered by Environmental Claims Administration within the New Jersey Department of Environmental Protection offers help to innocent parties suffering from direct or indirect damages resulting from the human-caused discharge of a hazardous substance. A property owner may file a claim for reimbursement for most of the expenses incurred to install a treatment device for a potable well or to connect to a public water supply due to a human-caused hazardous substance in the well water. For a list of PWTA parameters that may be eligible, [click here](http://www.state.nj.us/dep/pwta/MCL_Table_6-11-03.xls) (http://www.state.nj.us/dep/pwta/MCL_Table_6-11-03.xls) A claimant has 1 year from the date he/she learns that the well is contaminated to file a claim. There are specific eligibility requirements and guidelines for filing claims with the Spill Fund. For more information, please contact the NJDEP-Environmental Claims Administration at 609-777-0101 or visit their website at www.state.nj.us/dep/srp. You may write to the ECA: NJDEP-ECA/Spill Fund, P.O. Box 028, 401 E. State Street, Trenton, N.J. 08625-0028.

2.) The **New Jersey Housing and Mortgage Finance Agency (NJHMFA)** has a Potable Water Loan Program that is available to owners of single family residences whose source of potable water exceeds the State of New Jersey's Primary Drinking Water Standards. In addition, the loan program covers iron and manganese although these contaminants do not have Primary Drinking Water Standards. For further information, please contact the NJHMFA Hotline at 1-800-NJHOUSE (1-800-654-6873) or they may be reached at: P.O. Box 18550, 637 South Clinton Avenue, Trenton, N.J. 08650-2085 or on the web at: www.state.nj.us/dca/hmfasingfam/index.html#potable

Q38: Will the Spill Fund continue to pay for the operation and maintenance of units previously installed if the property is sold to a new owner?

A38: Spill Fund may continue to pay for the operation and maintenance of a treatment unit even if there is a new buyer/owner provided 1). There is an existing/active Spill Fund claim on file for that property, and 2). The well water is still contaminated above the related MCLs. The new owner must file a new claim, referencing the existing claim, and must meet all appropriate eligibility requirements.

Q39: What if a prospective buyer discovers the well water is contaminated prior to closing on a property and there is not an "existing" Spill Fund claim for that property. Will the Spill Fund pay for the treatment costs if the prospective buyer files a Spill Fund claim?

A39: No. The Spill Fund will **NOT** pay for the costs associated with the treatment unit because the buyer's claim will not meet the Spill Fund's eligibility requirements due to the fact that the buyer can not file as the owner of the property until the contract of sale is executed. The Spill Fund will only pay if there is an existing (approved) claim on the property before the sale and the new owner files a new claim which also meets all other eligibility requirements of the Spill Fund program.

Q40: What is the current effective Maximum Contaminant Level (MCL) for Arsenic in potable well water?

A40: Based on health related studies, the USEPA adopted a new standard on February 22, 2002 to lower the MCL for arsenic to 10 ppb. The effective date of this new MCL will be January 23, 2006, and because New Jersey adopts all USEPA primary drinking

water regulations by reference, all New Jersey drinking water supplies will be required to comply with 10 ppb by January 23, 2006. The purpose of this new standard is to decrease long-term exposure to arsenic in drinking water. In September 2003, Commissioner Campbell issued a policy directive for the development of a proposed regulation for arsenic in drinking water of 5 ug/l. This proposed regulation will provide added protection for New Jersey residents. In the meantime, the MCL for arsenic is 50 ppb from now until January 23, 2006.

Q41: My test results show a concentration for arsenic in my potable well water between 10 ppb and 50 ppb. Should I be concerned?

A41: Arsenic is a naturally occurring element found mostly in the Piedmont Region of New Jersey (link to: <http://www.state.nj.us/dep/dsr/arsenic/guide.htm>). It generally enters potable well water in these areas through natural processes. Arsenic may also have been released into the environment through human activities, such as smelting, arsenic pesticide use, and other industrial processes.

Although the current drinking water standard is 50 ppb, a drinking water standard of 10 ppb will take effect January 23, 2006. Certain types of public water systems will be required to comply with this new arsenic standard by 2006. Currently, PWTA regulations do not require homeowners to test for arsenic nor to provide treatment if arsenic levels are found to be above the MCL. However, local or county health agencies can require compliance with drinking water standards (including arsenic), and homeowners are advised to contact their local health agency. Although treatment is not required for arsenic results between 10 and 50 ppb, the Department strongly encourages you to consider doing so.

Arsenic has been linked to several different adverse health effects, such as diabetes mellitus, cardiovascular disease, nervous system damage, skin disorders and different forms of cancer.

The DEP has developed a fact sheet concerning arsenic in drinking water that can be downloaded at the following webpage: <http://www.state.nj.us/dep/dsr/arsenic/guide.htm>. If you have additional information concerning arsenic, please call us at 609-292-5550.

Q42: What can I do to reduce my exposure to arsenic?

A42: When arsenic is tested, the results are expressed as “total arsenic”. Of this total arsenic, there are generally two types (species) of arsenic that are found in well water in New Jersey, arsenate (As^{+5}) and arsenite (As^{+3}). Even though both species can be found in New Jersey, the arsenate (As^{+5}) species generally dominates. However, since there is no simple and affordable test commercially available to determine which species is present, it is best to assume both species are present so that arsenic can be effectively removed from potable well water by treatment. There are treatment systems available that will remove both arsenic species from potable water. The DEP has conducted research to determine the most efficient, cost effective, user-friendly treatment technologies currently available and the following provides a description of technologies.

Selecting Treatment for Removing Arsenic from Private Wells

When choosing an arsenic treatment option, there are various criteria to be considered by the homeowner and treatment installer. There are several factors to consider when making this decision: the level of arsenic in your drinking water, other water quality characteristics which may require treatment (such as hardness, or the presence of other contaminants which may need to be removed), the effectiveness of the treatment option, and the cost to install the unit and maintain it. In some cases, it will be necessary to pretreat the water so that the arsenic is removed. A combination of two or more different types of treatment may be needed to address all water quality treatment concerns. Homeowners are encouraged to work with a reputable water treatment firm and obtain all required local permits. The following steps may be used as guidance for selecting the most appropriate arsenic treatment option for your home:

Step 1 – Recommendations for arsenic treatment based on the detected level of arsenic:

\$ = Less than \$250 installation and less than \$50 yearly maintenance.

\$\$ = \$250-\$1000 installation and \$50-\$200 yearly maintenance.

\$\$\$ = Greater than \$1000 installation and greater than \$200 yearly maintenance

- At relatively low levels (below 10 ppb):

Option 1 (\$): Take no action because the water meets the regulatory standard.

Option 2 (\$): Install a POU device to remove arsenic from the water used for drinking and cooking.

Option 3 (\$\$ - \$\$\$): Install a POE device to remove arsenic from all the water in the home to ensure that there is no exposure to arsenic via the water in the home (especially, drinking water from the various taps in the home).

- At relatively moderate levels (between 10 ppb and 50 ppb):

Option 1 (\$): Install a POU device to remove arsenic from the water used for drinking and cooking because the untreated water will not meet the regulatory standard in 2006.

Option 2 (\$\$ - \$\$\$): Install a POE device to remove arsenic from all the water in the home to ensure that there is no exposure to arsenic via the water in the home (especially, drinking water from the various taps in the home).

- At relatively high levels (above 50 ppb):

Option 1 (\$): Install a POU device to remove arsenic from the water used for drinking and cooking because the untreated water currently does not meet the regulatory standard.

Option 2 (\$\$ - \$\$\$): Install a POE device to remove arsenic from all the water in the home to ensure that there is no exposure to arsenic via the water in the home (especially, drinking water from the various taps in the home).

Step 2 – Recommendations for arsenic treatment based on the effectiveness of the treatment option:

Treatment Option	Effectiveness (Arsenic level)	Costs (installation & maintenance)	Pro's (expense, easy to use, etc.)	Con's (expense, easy to use, etc.)
Anion Exchange (POE)	W, Z	\$\$	Relatively inexpensive, treats all water in the home.	Complicated maintenance, arsenic backwash discharged into septic or near home.
Adsorptive media (i.e, GFO, GFH, MAA, etc.) (POU or POE)	Y	\$\$ -\$\$\$	Very Effective, easy to use and maintain. Treats all water in the home or at the tap.	Relatively expensive start-up and maintenance costs for POE devices.
Reverse Osmosis (POU)	W	\$	Relatively inexpensive & user friendly.	Not effective if arsenite (As^{+3}) is present, only good for one tap in the home.
Coagulation/Filtration (POE)	X	\$\$\$	Effective technology, low maintenance.	Relatively expensive start-up and maintenance costs.

W – Treatment only removes Arsenate (As^{+5}), but not arsenite (As^{+3}).

X – Effective treatment

Y – Preferred treatment: Studies have shown that these treatments are effective and Efficient for the removal of arsenite (As^{+3}) and Arsenate (As^{+5})

Z – Appropriate Treatment when oxidization is used in process to convert arsenite (As^{+3}) to Arsenate (As^{+5}).

The following treatments are not effective for removing arsenic:

- Boiling water (will increase the arsenic concentration).
- Ultraviolet (UV) lights.
- Cation exchange (commonly called a water softener).
- Granular activated carbon (GAC).
- Air stripping